

# Missouri Energy Task Force

## Status Report



December 2010

# Missouri Energy Task Force

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## *Forward*

*This report is prepared in accordance with section 386.850, RSMo. This statute, in part, directs the Missouri Energy Task Force, created through Executive Order 05-46, to reconvene at least one time per year for the purpose of reviewing progress made toward meeting the recommendations set forth in the Task Force's final report in 2006. The Task Force met on December 1, 2010 and December 15, 2010. This report was adopted on December 15, 2010 by a vote of 7 to 1, Representative Ed Emery's Dissent can be found on page 36.*

## Overview

Executive Order 05-46, created the Missouri Energy Task Force and charged it with making specific recommendations to the governor on the following topics:

1. Lessen Missouri's dependence on oil and other fossil fuels;
2. Assist Missourians who need help paying their winter heating bills;
3. Promote the development of alternative fuel sources in ways that strengthen the farm economy of rural Missouri; and
4. Encourage Missouri utilities to develop and operate electric power generation resources to provide low-cost electricity well into the future.

This status report considers these recommendations in the order established by the original report, and in the context of the Task Force Action Plan that was released with the original report.

## Recommendations and Status Update

### **I. Recommendation to Maintain, Upgrade and Expand our Existing Utility Infrastructure and Improve Reliability.**

**Goal 4:** *Encourage Missouri utilities to develop and operate clean and affordable power generation well into the future.*

**Action Item 1:** The Missouri Public Service Commission (PSC) and the Missouri Department of Natural Resources (DNR) shall provide for the continuing operation of cost-effective and environmentally sound generation resources to meet existing needs.

**Status:**

- In November 2008, the citizens of Missouri passed Proposition C, which requires Missouri investor-owned utilities to meet certain renewable energy standards (RES) beginning in 2011. Rules to enact its provisions, (4 CSR 240-3.156 Electric Utility Renewable Energy Standard Filing Requirements and 4 CSR 240-20.100, Electric Utility Renewable Energy Standard Requirements) became effective on September 30, 2010. The Joint Committee on Administrative Rules voted to disapprove subsection (2)(A) and paragraph (2)(B)2. of 4 CSR 240-20.100. Those portions contained provisions on geographic sourcing of renewable energy and renewable energy credits (renewable energy certificates). Regarding the RES, there have been two legal actions filed in the Cole County Circuit Court. The first (10AC-CC00179) was a request for declaratory judgment concerning 393.1050, RSMo. This section of the statute provides an exemption from solar renewable energy standard requirements for qualifying utilities (The Empire District Electric Company). This suit was dismissed by the circuit court. The second is a

series of petitions for writ of review and requests for stay regarding the RES rules. The lead case (10AC-CC00512) was filed by the Missouri Energy Development Association.

The DNR is working on rules related to assuring no undue adverse environmental impacts from renewable generation facilities. The DNR Order of Rulemaking should be effective January 30, 2011.

- SB 376 (2009) established the Missouri Energy Efficiency Investment Act (Act.) The Act allows the PSC to permit electric companies to implement and recover costs related to PSC-approved energy efficiency and demand-response programs through non-traditional cost recovery methods. Cost recovery shall only occur when the program has been approved by the PSC, the program results in energy or demand savings, and the program is beneficial to all customers in the class for which the program is proposed. The PSC may develop cost recovery methods to encourage further investments in energy efficiency and demand response programs, which may include capitalization of investments, rate design modifications, accelerated depreciation, and allowing the company to retain a portion of the net benefits for its shareholders. The PSC is required to apportion the costs and benefits of energy efficiency and demand response programs to each customer class except that it may reduce or exempt such costs to low-income classes. Electric companies must annually report on their energy efficiency and demand response activities under the Act. Electric companies must list out separately on their customers' bills the cost associated with their energy efficiency and demand response programs. The Act prohibits any customer from participating in a company's energy efficiency or demand response program that offers a monetary reward for participating if the customer has received a tax credit through the low-income housing or historic preservation tax credit programs. SB 376 was Truly Agreed to and Finally Passed on May 14, 2009. Governor Nixon signed this bill into law on July 13, 2009. The Act allows the Commission to develop rules to implement the Act. In 2010, the PSC held three stakeholder workshops regarding the implementation of the Act (EW-2010-0265). The PSC filed a Proposed Rulemaking with the Office of Secretary of State on October 4, 2010 to enact the provisions of SB 376 (EC-2010-0368). A public hearing was held on December 20, 2010 to take comments for the final order of rulemaking. The Final Order of Rulemaking is expected in early 2011.
- As of July 2010, Missouri's residential electric customers were paying the ninth lowest electric rates in the country. Source: EIA Electric Power Monthly, September 2010, Table 5.6.B (See Attachment 1).
- The PSC approved innovative experimental regulatory plans for Kansas City Power & Light Company (KCPL) (EO-2005-0329) and the Empire Electric District Company (Empire) (EO-2005-0263) which included

capital investments in environmental improvements for a number of generating facilities and development of Iatan II, a coal-fired baseload unit.

- Integrated Resources Plan Rule Revision: The PSC Staff conducted four stakeholder workshops in 2009 and the Commission held public meetings in August 2009 and January 2010. The Commission also established a working file (EW-2009-0412) and a case file (EX-2010-0254) in its electronic filing system to allow interested entities to submit comments and review all activities related to the proposed rulemaking. Proposed revisions to the Chapter 22 Electric Utility Resource Planning rules were published by the Secretary of State's Office December 1, 2010. A public hearing regarding changes to the rules will be held January 6, 2011.
- Integrated Resources Plan filings have been most recently updated for KCPL (EE-2008-0034), Empire (EO-2011-0066), Union Electric Company d/b/a Ameren Missouri (Ameren Missouri) (EO-2007-0409) and KCP&L Greater Missouri Operations Company (GMO) (EE-2009-0237) to assure adequate generation and service of essential utilities including comparisons of supply and demand-side resources.
- The PSC implemented an Environmental Cost Recovery Mechanism rule, effective August 30, 2009, as mandated by SB 179 which will pass through environmental costs to rate payers.
- Rate cases have been conducted or are in the process of being conducted by the PSC with a thorough, comprehensive audit, for all investor-owned electric and three of the natural gas utilities in which utility providers were required to justify rates and affirm quality of services insuring that rates are based on "all relevant factors." KCPL (ER-2010-0355), GMO (ER-2010-0356), Ameren Missouri Electric (ER-2011-0028), Empire District Electric (ER-2011-0004), Atmos (GR-2010-0192), Southern Missouri Gas (GR-2010-0347), Laclede Gas (GR-2010-0171) and Ameren MissouriGas (GR-2010-0363).

Action Item 2: The PSC should continue to require investor-owned utilities to maintain capacity reserve margins in compliance with regional reliability requirements.

Status:

- The electric utilities regulated by the PSC are maintaining reserve margins in the range of 12 percent to 16 percent to minimize the additional costs of off-system energy purchases and to maximize reliability and availability of essential utility services.

- All of the investor-owned electric utilities are members of Regional Transmission Organizations (RTO), which allow the electric utilities access to available generation from other electric utilities in their RTO. Ameren Missouri is a member of the Midwest Independent Transmission System Operator RTO and KCPL, GMO and Empire are members of the Southwest Power Pool RTO.

Action Item 3: The PSC should continue to work with the Midwest Independent Transmission System Operator (MISO) and the Southwest Power Pool (SPP) to develop firm, long-term transmission rights from generating plants to the customers they are serving.

Status:

- The PSC actively participates with the Organization of MISO States and the Regional State Committee of the SPP in activities involving the Federal Energy Regulatory Commission for not only access to local generation customer accessibility but in the area of transmission corridors that may be developed as part of large-scale renewable transmission systems.

Action Item 4: The PSC should continue to work with MISO and the SPP on expanding transmission infrastructure where such transmission will help reduce wholesale power costs and improve deliverability and power flows.

Status:

- The PSC continues to be actively engaged with MISO and SPP in efforts to improve transmission systems to realize wholesale cost savings and improve deliverability. During the 2010 fiscal year, the PSC was very involved in issues related to allocating the costs of transmission upgrades related to both reliability and economic concerns within the SPP region.
- The SPP Board of Directors approved a package of transmission expansion “Priority Projects” for further analysis and review. The PSC actively participates in the process to provide input related to the cost effectiveness of projects on Missouri’s investor-owned utilities. In January 2010, the following Priority Project, which directly impacts Missouri electric utilities, will be presented for approval to the Board of Directors and Regional State Committee of state regulators:
  - 345 kV line from Cooper in the southeast corner of Nebraska through Maryville, Missouri to Sibley (just east of Kansas City, Missouri) at an estimated cost of \$278 million.

- The SPP created a new “Integrated Transmission Planning” (ITP) process to implement a proactive transmission philosophy. This ITP has been successfully filed with and received approval from FERC. The ITP is designed to, amongst other goals, “help reduce wholesale power costs and improve deliverability and power flows”. The PSC continues to be engaged in the development of this process.
- MISO filed with FERC the concept of a “Multi-Value Project” (MVP), a project designed to meet reliability and / or economic considerations. As of October 2010, FERC had not approved the tariff filing establishing the MVP concept. The PSC continues to be engaged in the development of this process.

Action Item 5: The PSC should work to develop more fluid seams agreements between Missouri utilities.

Status:

- The Missouri PSC, through its membership in the Regional State Committee (RSC) for the Southwest Power Pool, monitors issues related to seams agreements between regional transmission organizations (RTOs) and between RTOs and Missouri utilities. Furthermore, through its participation in the RSC, the Missouri PSC works on the proper cost allocation to pay for transmission facilities that impact multiple RTOs.

Properly constructed seams agreements can provide additional opportunities for Missouri utilities to utilize generation resources located in the state of Missouri, but not within the footprint of the RTO a utility belongs to.

- SPP has established a Seams Steering Committee (SSC), to better work on seams issues between SPP and other entities, including the Association of Electric Cooperatives, Incorporated (AECI). AECI includes a number of Missouri cooperative electric utilities, and the Midwest ISO, which includes Ameren Missouri. A PSC employee has been assigned as the representative on this committee with the charge of serving as the voice of the Commission and keeping the Commission apprised of issues before the committee.
- The PSC hosted a “Missouri Transmission Summit” in May 2010 in order to discuss general Missouri transmission issues, including issues of cost allocation and transmission planning across seams. Stakeholders indicated at the summit that additional time and opportunity to work together to resolve transmission issues outside of a formal PSC processes would be beneficial. Since the meeting, the PSC has received updates of

discussions involving Missouri utilities and seams issues, and attended a southwestern Missouri planning meeting between SPP and AECI in October, 2010.

Action Item 6: The PSC should continue to investigate cost-effective opportunities for demand response programs that will enhance the reliability of the system.

Status:

- All four of Missouri's major investor-owned electric utilities have implemented demand-response programs for their largest customers.
- KCPL has continued its successful demand response program for its residential and small commercial customers, known as Energy Optimizer.
- The other investor-owned utilities continue to evaluate demand response programs as a part of their resource planning process.
- The PSC Staff continues to work with other state agencies and other interested parties in collaboratives with the utilities to establish demand response programs and to measure their effectiveness.
- SB 376 (2009) established the Missouri Energy Efficiency Investment Act (Act). The Act allows the PSC to permit electric companies to implement and recover costs related to PSC-approved energy efficiency and demand-response programs through non-traditional cost recovery methods. Cost recovery shall only occur when the program has been approved by the PSC, the program results in energy or demand savings, and the program is beneficial to all customers in the class for which the program is proposed. The PSC may develop cost recovery methods to encourage further investments in energy efficiency and demand response programs, which may include capitalization of investments, rate design modifications, accelerated depreciation, and allowing the company to retain a portion of the net benefits for its shareholders. The PSC is required to apportion the costs and benefits of energy efficiency and demand response programs to each customer class except that it may reduce or exempt such costs to low-income classes. Electric companies must annually report on their energy efficiency and demand response activities under the Act. Electric companies must list out separately on their customers' bills the cost associated with their energy efficiency and demand response programs. The Act prohibits any customer from participating in a company's energy efficiency or demand response program that offers a monetary reward for participating if the customer has received a tax credit through the low-income housing or historic preservation tax credit programs. SB 376 was Truly Agreed to and Finally Passed on May 14, 2009. Governor Nixon signed this bill into law on July 13, 2009. The Act allows the Commission

to develop rules to implement the Act. In 2010, the PSC held three stakeholder workshops regarding the implementation of the Act (EW-2010-0265). The PSC filed a Proposed Rulemaking with the Office of Secretary of State on October 4, 2010 to enact the provisions of SB 376 (EX-2010-0368). A public hearing was held on December 20, 2010 to take comments for the final order of rulemaking. The Final Order of Rulemaking is expected in early 2011.

Action Item 7: The PSC should review and revise the PSC's Integrated Resource Planning rules, as necessary to ensure that cost-effective energy, efficiency conservation and verifiable demand response programs are given the same consideration as supply side resource options.

Status:

- The PSC is continually reviewing the electric utilities IRP compliance filings and rules to achieve cost-effective supply-side resources and demand-side resources.
- Resources Plan filings have been most recently updated for KCPL (EE-2008-0034), Empire (EO-2011-0066), Ameren Missouri (EO-2007-0409) and GMO (EE-2009-0237).
- The PSC hired MSB Energy Associates to assist the Commission in the first major rewrite of the Commission's electric utility resource planning rules since their inception in 1993. The Staff conducted four stakeholder workshops in 2009 and the Commission held public meetings in August 2009 and January 2010. The Commission also established a working file (EW-2009-0412) and a case file (EX-2010-0254) in its electronic filing system to allow interested entities to submit comments and review all activities related to the proposed rulemaking. Proposed revisions to the Chapter 22 Electric Utility Resource Planning rules were published by the Secretary of State's Office December 1, 2010. A public hearing regarding changes to the rules will be held January 6, 2011.

## II. Recommendations to Lessen Missouri's Dependence on Oil and Promote the Rural Farm Economy:

### *Goal 1: Lessen Missouri's dependence on oil and other fossil fuels*

- *Current annual ethanol production capacity in Missouri is now approximately 275,000,000 gallons.<sup>1</sup>*
- *Current biodiesel production capacity in Missouri is approximately 158,000,000 {million}<sup>2</sup> gallons. Approximately 60,000,000 gallons are under construction with an expected production date of on or before March 1, 2009 (source: Missouri Department of Agriculture).<sup>3</sup>*

### *Goal 3: Promote the development of alternative fuel sources in ways that strengthen the rural farm economy.*

- *All ethanol production facilities in Missouri are owned by farmers.*
- *All biodiesel production facilities in Missouri are either majority or wholly owned by farmers.*
- *Biodiesel production facilities currently under construction will be farmer-owned.*

Action Item 1: The state should require the use of at least 10 percent Ethanol-blended gasoline in Missouri by 2008.

#### Status:

**HB 1270**, (93rd General Assembly, 2006) RSMo. Sec. 142.031 and 414.255, **Missouri Renewable Fuel Standard Act**.

- Requires that on and after Jan. 1, 2008, all gasoline sold or offered for sale in Missouri at retail shall be fuel-ethanol blended gasoline.
  - Status: Implemented effective Jan. 1, 2008 and compliance ensured by the Department of Agriculture's Fuel Quality Program.
- If distributors are unable to obtain fuel ethanol or ethanol-blends at the same or lower price than unblended gasoline, the sale of the fuel will not be a violation of this Act.
  - Status: Implemented effective Jan. 1, 2008 and compliance ensured by the Department of Agriculture's Fuel Quality Program.

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<sup>1</sup> Since 2006, the annual ethanol production capacity in Missouri has remained constant at approximately 275,000,000 gallons. Missouri currently produces approximately 275,000,000 gallons of ethanol annually.

<sup>2</sup> “million” was incorrectly included in the Task Force’s Final Report in 2006.

<sup>3</sup> In 2010, the biodiesel production capacity in Missouri was approximately 250,000,000 gallons.

<sup>4</sup> Generally the reference to 1,000 MW of renewable energy resources reflects the current levels of renewables serving Missouri regulated utilities plus those resources that are anticipated will be added by 2015. Current renewables were established without any requirements under SB 376 (that is primarily focused on cost effective energy efficiency programs). Most of these renewable resources were constructed well in advance of the recently

<sup>2</sup> “million” was incorrectly included in the Task Force’s Final Report in 2006.

<sup>3</sup> In 2010, the biodiesel production capacity in Missouri was approximately 250,000,000 gallons.

- A 30-cent per gallon subsidy for qualifying producers under the act is sunset on Dec. 31, 2009.
  - Status: There are 13 plants currently eligible to receive biodiesel producer incentives. Although no additional plants can become eligible for this program, the 13 plants shall continue to be eligible for the remainder of their original 60 month time period under the same terms and conditions of this section.

**SB 1181**, (94th General Assembly, 2008) (RSMo. Sec. 30.750: **Linked-Deposit Loans for Alternative Energy**.

- Allows for low-interest loans through the linked-deposit loan program for eligible alternative energy operations producing and selling fuel or power from alternative (non-fossil) energy sources including solar, hydroelectric, wind and qualified biomass. SB 270, (93rd General Assembly, 2005) RSMo. Sec. 30.860 expanded the categories of eligible applicants for linked-deposit loans to include eligible facility borrowers, which are Missouri facilities using agricultural products to produce non-fossil fuels such as ethanol.
  - Status: This program has been implemented by the Missouri State Treasurer.

**The Task Force recommends further analysis and study on the actual impact of Missouri ethanol production on reducing Missouri's dependence on oil and fossil fuels.**

Action Item 2: The state should remove regulatory obstacles for renewable fuels.

Status:

**HB 1270**, Second Regular Session, 93rd General Assembly (2006) RSMo. Sec. 414.255: **Missouri Renewable Fuel Standards Act**.

- Requires that on and after January 1, 2008 all gasoline sold in Missouri at retail shall be ten percent (10%) fuel ethanol-blended gasoline except for aviation fuel, premium gasoline, E75-E85 fuel ethanol, bulk transfers between terminals, marinas that sell fuel exclusively to watercraft, and any specific exemptions declared by the U.S. Environmental Protection Agency. Status: These provisions have been implemented by the Department of Agriculture's Fuel Quality Program.

**SB 931**, Second Regular Session, 94th General Assembly (2008) RSMo. Sec. 135.710: **Tax Credit for Renewable Fuel Stations**.

- Creates an income tax credit for the costs of constructing a qualifying alternative fuel vehicle refueling property. The tax credit shall not exceed the lesser of \$20,000 or 20 percent of the costs directly associated with the purchase and installation of any alternative fuel storage and dispensing

equipment. The cumulative amounts of credits that may be claimed shall not exceed \$3 million for tax year 2009. The limit is reduced to \$2 million in tax year 2010 and further reduced to \$1 million for tax year 2011.

- Status: This action item is being implemented by the Department of Natural Resources' Division of Energy, in coordination with the Department of Revenue. DNR reports that they are finalizing the application process and forms, which they expect to have completed by mid-December. This information will also be posted to the DNR website at that time.

**HB 2058, Second Regular Session, 94th General Assembly (2008) New Generation Cooperative Incentive Tax Credits.**

- Extends the sunset date on the New Generation Cooperative Incentive Tax Credits to Dec. 31, 2016.
  - Status: The sunset date for this program (Section 348.436) has been extended and is now Dec. 31, 2016.

**Action Item 3:** DNR should work with Missouri automakers, other states, groups and the federal government to increase the Corporate Average Fuel Economy (CAFÉ) standards.

Status:

- Air quality officials at DNR have consistently worked with stakeholders to achieve workable air quality standards.
- On November 9, 2009, the Missouri Department of Natural Resources submitted comments on the Draft Environmental Impact Statement (DEIS) to address the potential environmental impacts of new Corporate Average Fuel Economy (CAFE) standards that supported the proposal by the National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency (EPA) to implement a more stringent CAFE standard.
- On September 16, 2009, the U.S. Department of Transportation (DOT) Secretary Ray LaHood and U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson jointly proposed a rule establishing a national program that would improve vehicle fuel economy and reduce greenhouse gases (GHG). The proposed program would conserve billions of barrels of oil, save consumers money at the pump, increase fuel economy, and reduce millions of tons of GHG emissions.
  - Under the proposed program, which covers model years 2012 through 2016, automobile manufacturers would be able to build a single, light-duty national fleet that satisfies all federal requirements as well as the standards of California and other states. The proposed program includes miles per gallon requirements

under NHTSA's Corporate Average Fuel Economy Standards (CAFE) program and the first-ever national emissions standards under EPA's greenhouse gas program. The collaboration of federal agencies for this proposal also allows for clearer rules for all automakers, instead of three standards (DOT, EPA, and a state standard).

- Specifically, the program would increase fuel economy by approximately 5 percent every year; reduce greenhouse gas emissions by nearly 950 million metric tons; save the average car buyer more than \$3,000 in fuel costs over the life of the vehicle; and conserve 1.8 billion barrels of oil.
- NHTSA and EPA are providing a 60-day comment period that begins with publication of the proposal in the Federal Register. The proposal and information about how to submit comments are at: [EPA regulations](#) and [NHTSA](#).
- In April 2010, the NHTSA and the EPA released the final federal CAFE gas emission standards for car models in the 2012 – 2016 range.
- Starting with 2012 model year vehicles, the rules together require automakers to improve fleet-wide fuel economy and reduce fleet-wide greenhouse gas emissions by approximately five percent every year. NHTSA has established fuel economy standards that strengthen each year reaching an estimated 34.1 mpg for the combined industry-wide fleet for model year 2016. Because credits for air-conditioning improvements can be used to meet the EPA standards, but not the NHTSA standards, the EPA standards require that by the 2016 model-year, manufacturers must achieve a combined average vehicle emission level of 250 grams of carbon dioxide per mile. The EPA standard would be equivalent to 35.5 miles per gallon if all reductions came from fuel economy improvements.

- On October 25, 2010, EPA, under the authority of the Clean Air Act, and NHTSA, under the authority of the Energy Independence and Security Act (EISA), proposed emission standards for CO<sub>2</sub> and fuel consumption standards, respectively, tailored to each of three main regulatory categories: (1) combination tractors; (2) heavy-duty pickup trucks and vans; and (3) vocational vehicles. The rules would apply to model year vehicles 2014-2018. There will be a 60-day comment period beginning when the rules are published in the Federal Register.
  - The agencies estimate that the combined proposed standards have the potential to reduce greenhouse gas emissions by nearly 250 million metric tons and save approximately 500 million barrels of oil over the life of vehicles sold from 2014 to 2018, while providing an estimated \$35 billion in net benefits to truckers, or \$41 billion in net benefits when societal benefits are included.



Action Item 4: Revise Missouri Ethanol & Other Renewable Fuel Sources Commission (Section 414.420 RSMo. 2000) to focus on the development of all alternative fuels and expand the membership of the commission to include members that will provide subject matter and expertise.

Status:

**SB 54**, First Regular Session of the 94th General Assembly (2007), RSMo. 414.772.

- Renames the Missouri Ethanol and Other Renewable Fuel Sources Commission to the Missouri Alternative Fuels Commission and expands its membership from seven to nine members. The two additional members shall be appointed by the governor, bringing the total number of governor-appointed members to five. The governor-appointed members shall be engaged in the production or sale of alternative fuels.
  - The act directs the Commission to:
    - Make recommendations on legislation to facilitate the sale and distribution of alternative fuels and alternative fuel vehicles;
    - Promote the development and use of alternative fuel vehicles and other related technology;
    - Educate consumers about alternative fuels;
    - Develop a long-range plan to reduce petroleum fuel use;
    - Report annually to the General Assembly.
  - Status: The Department of Agriculture has not received any recommendations or reports from this Commission.

Action Item 5: DNR and OA should continue exploring cost-efficient opportunities to reduce the state's consumption of petroleum fuels in the state's fleet vehicles.

- Fleet Energy Efficiency  
Compared with FY 2009, state employees drove 1.1 percent fewer miles in FY 2010. This was the second year in a row that total business miles declined. For FY 2011, agencies have been tasked with reducing employee business miles by 10 percent off of the FY 2009 levels.

All state entities that purchased new vehicles in FY 2009 met or exceeded the fleet energy-efficiency requirements (state agencies are required to purchase CAFE-compliant vehicles). The overall CAFE rating for passenger cars purchased was 36.0 MPG which was above the minimum requirement of 27.5 MPG. The overall CAFE rating for light trucks purchased was 28.3 MPG which was above the minimum requirement of 20.7 MPG.

- Purchase of Alternative-Fuel Vehicles

During the 2007 legislative session, the General Assembly passed and the governor signed into law (SB 54), which places more focus on the purchase of alternative fuel vehicles by state agencies. Section 37.455 RSMo, requires that 70 percent of new state vehicles purchased must be capable of using 85 percent ethanol (E-85) alternative fuel. Four state agencies did not meet this requirement in FY 2009.

The cost of a flexible fuel vehicle versus a non-flexible fuel vehicle is nominal. E-85, flexible fuel vehicles are the lowest cost of entry when considering the various alternative fuel options available.

- Use of Alternative Fuels in State Vehicles

For vehicles capable of using alternative fuels, state law requires that the appropriate alternative fuel be used in these vehicles 30 percent of the time. For FY 2009, the percentage of alternative fuel use was 27 percent.

- Efforts to Increase Efficiency and Alternative Fuel Use in State Vehicles

The Department of Natural Resources Division of Energy carries out a number of information and assistance efforts regarding energy efficiency and alternative fuel use in state vehicles: The Division of Energy hosts an annual meeting of state/university/college fleet managers; provides information and staffing at rideshare/alternative fuel displays at state agency buildings in Jefferson City; provides alternative fuel signs for state agencies' fleet parking lots to remind employees to refuel with alternative fuels; provides window stickers and fuel door stickers to make sure employees know when they're driving alternative fuel vehicles; and writes newsletter articles for state agencies' newsletters.

### **III. Recommendations to Reduce Missouri's Dependence on Oil and other Fossil Fuels.**

Goal 1: *Lessen Missouri's dependence on oil and other fossil fuels*

Action Item 1: Missouri should continue to lead the state by example on energy efficiency and conservation issues.

1. The Office of Administration (OA) should construct new buildings to the 2006 International Energy Efficiency Code (IEEC), ENERGY STAR specifications or other stringent guidelines.

Status:

- OA – FMDC was tasked to take the lead in the development of Energy Action Plans, which define energy conservation objectives and provide guidance to management and staff. The Energy Action Plans were put into practice through distribution to all management and staff, and was also

disseminated to state agencies and their staff from the OA Commissioner. The OA - FMDC Director assembled a team of numerous state agencies to review, and combine the two Energy Action Plans into a single revised document they entitled the “State Facilities Conservation Program”, and this new program was distributed.

- In the National Governors Association Greening the State Capitols study, in the final release to OA – FMDC, the study conclusion stated “*The State Agency Facility Energy Conservation Action Plan lays out a robust set of energy-saving policies, which casts the state as a role model in energy efficiency. The Plan explains energy efficiency in a manner that engages not just energy-savvy engineers, but all state employees, and encourages everyone to do their part.*” The Energy Action Plans were combined into a single revised document entitled the “State Facilities Conservation Program”. This new program document contains the original policies referred to above; however the new single document “State Facilities Conservation Program” contains several additional conservation policies, objectives and requirements.
- The State of Missouri’s OA – FMDC, through a public private partnership that included two companies and a municipal utility, developed a Landfill Gas Combined Heat and Power Cogeneration facility. This newly developed cogeneration facility provides renewable power to the municipal utility and it also provides the renewable thermal energy to two state facilities. This project was recently recognized by the Environmental Protection Agency, through their Landfill Methane Outreach Program as their “2009 project of the year”.
- The State of Missouri’s OA – FMDC has developed renewable energy plants at the Southeast Correctional Center located in Charleston, and the South Central Correctional Center located in Licking. These two plants provide thermal energy to these facilities by utilizing wood chips from renewable resources from local providers.
- Governor Nixon’s Executive Order 09 – 18 has raised the bar by proclaiming “Energy efficiency shall be made a priority in design, construction and operation of state government buildings.” Along with the other goals and objectives as set forth in the proclamation, we have completed the revision process on the following:
  - The Energy Action Plans have been combined into a single document entitled “State Facilities Conservation Program” that were updated and amended to include advanced Energy Conservation objectives, guidelines, recommendations, and requirements for implementation by management and staff of OA – FMDC and the state agencies and their staff.

- The Building Energy Efficiency Design Standards were revised to include Governor Nixon’s Executive Order 09 – 18 to “be at least as stringent as the most recent energy efficiency standards of the International Energy Conservation Code (IECC).”
- Governor Nixon’s Executive Order 09 – 18, requires specifications “be at least as stringent as the most recent energy efficiency standards of the International Energy Conservation Code (IECC)”, which will require a continued update of the Building Energy Efficiency Design Standards as the IECC is updated.
- SB 1181, RSMo Sec. 8.295 - 8.837: **Energy Efficiency in State Buildings.**
  - Requires that up to 10 percent of the funds appropriated each year for the Facilities Maintenance Reserve Fund be used for otherwise eligible projects that are also energy projects with a 15-year or sooner payback.
    - Revenue shortfalls over the last several years have caused funding reductions and withholdings, which have impeded implementation of energy conservation projects. However energy conservation efforts are still being implemented through operations with more efficient replacements and through low cost or no cost operational changes to the facilities and the operational sequences and schedules.
    - With the revenue shortfalls, OA – FMDC staff were directed to seek additional funding through grant application processes. The Department of Natural Resources has allocated a total of \$3.3 million of its State Energy Program American Reinvestment and Recovery Act funds to energy efficiency efforts at state facilities, park and historic sites.
  - Design documents submitted to the OA for new construction or substantial renovation of certain state buildings shall include a projection of the energy savings resulting from meeting the state minimum energy efficiency standard.
    - The Building Energy Efficiency Design Standards are currently in the process of being revised to include Governor Nixon’s Executive Order 09 – 18 to “be at least as stringent as the most recent energy efficiency standards of the International Energy Conservation Code (IECC).”
  - By Jan. 1, 2009, DNR shall modify the minimum energy standard to be as least as stringent as the 2006 International Energy Conservation Code (2006 IECC) or the latest version of the code.
    - The Building Energy Efficiency Design Standards are currently in the process of being revised to include Governor Nixon’s Executive Order 09 – 18 to “be at least

- as stringent as the most recent energy efficiency standards of the International Energy Conservation Code (IECC).”
- All OA-FMDC design's for state buildings larger than 5,000 square feet involving new construction or renovation considered for purchase or lease shall comply with the minimum energy efficiency standard. OA may make exceptions for safety or in cases where the cost of compliance exceeds energy cost savings.
  - The Building Energy Efficiency Design Standards include Governor Nixon’s Executive Order 09 – 18 to “be at least as stringent as the most recent energy efficiency standards of the International Energy Conservation Code (IECC).”
- **SB 54, Section 1**, First Regular Session of the 94th General Assembly (2007): State Requirement for Flex-Fuel vehicles in fleet.

Action Item 2: The state should promote the adoption of county and municipal energy efficiency codes on a county-by-county, city-by-city basis. The Missouri General Assembly should develop a Model Energy Efficiency Code for Missouri based on the 2004 IEEC. If the General Assembly does not adopt a code, the DNR Energy Center {now known as Division of Energy} should develop and promote a code for first and second-class counties.

Status:

- A model energy-efficiency code has not yet met with approval by the General Assembly.
- DNR plans to offer training to local government officials in 2010/2011 on the benefits of energy efficiency building codes.
- DNR responded to a Request for Proposal issued by the Pacific Northwest National Laboratory on behalf of the U.S. Department of Energy and was awarded funds to conduct activities related to energy efficient building standards. The DNR proposal is to conduct an assessment of current standards adopted and training efforts in the state, develop a model energy code for voluntary local adoption and develop, through stakeholder participation, a toolkit that will be provided to local officials. The project period ends June 30, 2011.

Action Item 3: Missouri should monitor the adoption of minimum efficiency standards for appliances.

Status:

- SB 1181, RSMO. Secs. 701.500 - 701.515: **Product Energy Efficiency Standards.** Creates minimum energy efficiency standards for certain new products sold or installed in the state.
- SB 734 Section 701.500-701.506 RSMo 2009 amended **Product Energy Efficiency Standards** statute adopted in 2008 to clarify minimum standard parameters.

Action Item 4: Missouri should work to diversify its electric generation portfolio in a cost-efficient manner.

Status:

- Missouri's regulated electric utilities have achieved significant deployment of energy efficiency and renewable resources.
  - Prior to January 1, 2009, Empire achieved the milestone of receiving 15 percent of its energy from renewable resources. Empire was the first electric service provider in the state to do this. It achieved this prior to any state or federal mandates. Empire has sold the renewable attributes of this energy as Renewable Energy Credits (REC). Revenues from the sale of RECs help to offset the cost of these resources, a benefit to the customers served by Empire.
- Over the next 15 years, Missouri should be able to offset more than 850 MW of generation that would have been needed otherwise as a result of PSC regulated electric utility energy efficiency and demand-response programs.
- By 2015 or sooner, PSC regulated electric utilities will be receiving power from more than 1,000 MW<sup>4</sup> of renewable energy resources. (source: MEDA) This trajectory of reaching 1000 MW of power from renewable sources by 2015 is in excess of the requirement to reach 5% by 2014 as set forth in Proposition C (RSMo. Secs. 393.1020 - 393.1020).

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<sup>4</sup> Generally the reference to 1,000 MW of renewable energy resources reflects the current levels of renewables serving Missouri regulated utilities plus those resources that are anticipated will be added by 2015. Current renewables were established without any requirements under SB 376 (that is primarily focused on cost effective energy efficiency programs). Most of these renewable resources were constructed well in advance of the recently passed Electric Renewable Energy Standard (RES). Some of the planned renewables are in response to the RES and specific projects were determined based on minimizing impacts on customer rates while complying with the RES. 1,000 MW was not a „target”, it just happened to work out to be about that much when current plus forecasted resources were added up. (Source MEDA)

- The electric utilities regulated by the PSC are required to conduct detailed integrated resource planning. This process carefully considers, analyzes and identifies a range of resources for future construction that results in the lowest impact on future electric rates. Where cost-effective, this results in deployment of a range of electric generation resources. This process has been modified recently by initiative petitions and the Legislature as detailed below.
  - SB 1181, RSMo. Sec. 143.121: **Tax Incentives for Energy Efficiency.**
    - Creates an income-tax deduction for either the cost of a DNR-certified home energy audit or for the cost of implementing any of the recommendations made by such an audit, or both. The deduction is limited to \$1,000 per taxpayer per year, up to \$2,000 cumulative lifetime total per taxpayer.
  - SB 1181, RSMo. Sec. 144.526: **Show-Me Green Sales Tax Holiday.**
    - Beginning in 2009, during a seven-day period beginning on April 19 and ending April 25 of each year, all sales of Energy Star certified new appliances will be exempt from state sales tax. Local political subdivisions may opt out at their choosing.
  - Proposition C, approved by voters on Nov. 4, 2008, RSMo. Secs. 393.1020 - 393.1020: **Renewable Energy Standard.**
    - Establishes the Renewable Energy Standard under which the Public Service Commission shall prescribe by rule a portfolio standard for investor-owned electric utilities to generate or purchase electricity from renewable energy resources that constitute the following portion of each utility's electric sales:
      - No less than 2 percent for calendar years 2011 through 2013;
      - No less than 5 percent for calendar years 2014 through 2017;
      - No less than 10 percent for calendar years 2018 through 2020; and
      - No less than 15 percent in each calendar year beginning in 2021.
    - At least 2 percent of the portfolio must be derived from solar energy. The resulting rate increase is capped at 1 percent of the company's total, non-renewable electric sales per year.
  - SB 54, RSMo. 386.890: **Net Metering.**
    - Requires retail electric suppliers to make net metering available to customers who have their own electric generation units that are powered by renewable resources.

- SB376 RSMo 393.1075 – **Missouri Energy Efficiency Investment Act.**
  - The PSC must allow electric companies to implement and recover costs related to PSC-approved demand-side programs with a goal of achieving all cost-effective demand-side savings. Cost recovery shall only occur when the program has been approved by the PSC, the program results in energy savings, and the program is beneficial to all customers in the class for which the program is proposed. In determining recovery of costs, the PSC shall use a cost-effectiveness test.
  - The act allows electric companies to implement certain programs that are paid for through alternate measures even if the programs do not meet the cost-effectiveness test.
  - The PSC may develop cost recovery methods to encourage further investments in demand-side programs, which may include capitalization of investments, rate design modifications, accelerated depreciation, and allowing the company to retain a portion of the net benefits for its shareholders.
  - The PSC is required to apportion the costs and benefits of energy efficiency programs to each customer class except that it may reduce or exempt costs to low-income classes.
  - Customers may elect not to participate in an electric company's demand-side programs and not be charged for the associated costs provided the customer meets certain criteria. Customers who elect not to participate will not be eligible to participate in the programs in the future, except as provided by rule by the PSC. Customers who participate in programs starting after August 1, 2009 must participate in the funding recovery for a certain period of time as established by PSC rule.
  - Electric companies must annually report their energy efficiency activities under the act.
  - Electric companies must separately list on its customers' bills, costs associated with its energy efficiency programs.
  - The act prohibits any customer from participating in a company energy efficiency program that offers a monetary reward for participating if the customer has received a tax credit through the low-income housing or historic preservation tax credit programs.
  - The act requires that any appliance purchased with state money until August 28, 2011 be an Energy Star rated appliance, unless it is cost-prohibitive.
  - The PSC filed a Proposed Rulemaking with the Office of Secretary of State on October 4, 2010 to enact the provisions of SB 376 (EX-2010-0368). A public hearing

was held on December 20, 2010 to take comments for the final order of rulemaking. The Final Order of Rulemaking is expected in early 2011.

Action Item 5: The state of Missouri should work with key stakeholders to improve and expand consumer education efforts.

Status:

- **Be Energy Efficient (BEE):** The Public Service Commission and the Department of Natural Resources have worked with community action agencies, agencies advocating for older citizens and natural gas and electric utilities to set up an informational program including brochures, appearances and a web site to inform and encourage consumers about the importance and methods of conserving energy. All PSC-regulated electric utilities currently have customer education campaigns in place and additional programs are being considered for deployment.
- The Missouri Public Service Commission held two workshops on the State of the Electric Industry. Presentations can be found at:  
<http://psc.mo.gov/electric/>
- The Public Service Commission has exercised opportunities to educate consumers on energy efficiency through providing information at the state fair, Show-Me Summit on Aging and Health, Community Action Agency Energy Forums and other efforts around the state.
- The Public Service Commission established several working files in its electronic filing system to provide transparent access to all activities related to energy issues:
  - EW-2010-0008 – A repository of items related to the Future of the Electric Industry Workshops.
  - EW-2009-0412 – A repository of items related to the rewrite of Chapter 22 Electric Utility Resource Planning rules.
  - EW-2009-0324 – A repository for items related to Renewable Energy Workshops and Proposition C proposed rulemaking.
  - EW-2009-0293 and EW-2009-0292 – Repositories for items related to the Consideration of Adoption of PURPA Section 111(d)(18) Smart Grid Investments Standard and PURPA Section 111(d)(19) Smart Grid Information Standard, as required by Section 1307 of the Energy Independence and Security Act of 2007.
  - EW-2009-0291 – A repository for items related to the Consideration of Adoption of PURPA Section 111(d)(17) Rate Design Modifications to Promote Energy Efficiency Investments Standard, as required by Section 532 of the Energy Independence and Security Act of 2007.

- EW-2009-0290 – A repository for items related to the Consideration of Adoption of PURPA Section 111(d)(16) Integrated Resource Planning Standard, as required by Section 532 of the Energy Independence and Security Act of 2007.
- EW-2009-0275 – A repository for items related to the collaborative workshop ordered by the Commission, on its own motion, to consider the most efficient and cost-effective manner to construct and finance a potential second nuclear generating unit at the Callaway Nuclear Plant site.
- The PSC Renewable Energy/Proposition C and Electric Utility Resource Planning rulemaking workshops have included a wide array of stakeholders, including representatives from wind and solar sectors, the Sierra Club, and Renew Missouri. This outreach effort has provided a unique educational opportunity for non-traditional utility stakeholders, the Commission and its staff.
- Many of the workshops held by the Commission were webcast in real time allowing stakeholders and public input into the process. Electronic versions of these workshops are available for viewing through the Commission's web site [www.psc.mo.gov](http://www.psc.mo.gov).
- DNR has provided, and continues to provide information to the public, utilities, PSC and OPC staff, business organizations and others regarding the focus of energy-efficiency programs and efforts that will be launched and supported with energy funds coming to DNR from the federal American Recovery and Reinvestment Act.

#### **IV. Recommendations to Ensure Missourians Have Affordable Utility Service.**

Goal 2: *To provide affordability assistance to low-income Missourians*

Action Item 1: The Governor, Missouri General Assembly, PSC, DNR and Divisions of Family Services, (DFS) *{now known as Family Support Division (FSD)}* should work with Missouri's congressional delegation to obtain at least \$3.16 billion in funding for the Low-Income Heating Assistance Program, LIHEAP.

Status:

- On September 28, 2010, the Missouri Public Service Commission Chairman Robert Clayton and Commissioner Robert Kenney, Commission Staff members Gay Fred and Contessa Poole-King, created a partnership with various St. Louis government and civic leaders to coordinate all

available resources and perhaps create additional resources to help protect the health and safety of the most vulnerable citizens in St. Louis City during the winter heating season. Members of the partnership included: City of St. Louis Mayor's Office and Human Services Office, City of St. Louis Fire Department, Heat-Up/Cool-Down St. Louis, United Way 2-1-1, Senator McCaskill's Office, Department of Natural Resources, Human Development Corporation, Gas Workers Union of St. Louis, Ameren Missouri, Laclede Gas Company, Office of the Public Counsel, Department of Family Support Division.

- Led by Public Counsel and Laclede Gas Company, members of the task force developed a program to reduce the up-front deposit that disconnected low-income Laclede Gas customers (or customers threatened with disconnection) must make to initiate or retain service. The PSC approved the program effective November 26, 2010. The task force is investigating another program that would promote health and safety by helping low-income customers pay for emergency repairs to dangerous customer-owned natural gas equipment.
- Federal Fiscal Year (FFY) 2011 appropriations are undetermined. The House Subcommittee on Appropriations recommend \$5.1 billion for LIHEAP on July 15, 2010, as part of its version of the Federal Fiscal Year (FFY) 2011 Labor, Health and Human Services and Education Appropriations bill. It was also the same funding level provided for FFY 2010; however, details of the recommended funding level were not released. On July 27, 2010, the Senate Committee on Appropriations approved \$3.3 billion for LIHEAP for FFY 2011, the same level requested by the president, but \$1.9 billion less than the \$5.1 billion provided by the House Subcommittee on Appropriations. The Senate bill provides for \$3.3 billion, of which \$2.7 billion would be provided through the formula grant of the program and \$590.3 million through contingency. A Continuing Resolution was passed until December 3, 2010, based on the FFY 2010 appropriation level of \$5.1 billion. The Department of Health and Human Services is likely to obligate funds based on the Senate bill, in the event that Congress provides less than \$5.1 billion for FFY 2011. The projected FFY 2011 Grant Award total allotment for the state of Missouri under the Senate bill is \$50,000,000.
- Historical Missouri LIHEAP Funding:
  - FFY 10 Regular: \$ 95,256,956 Contingent: \$ 11,861,501
  - FFY 09 Regular: \$102,541,119 Contingent: \$ 11,361,193
  - FFY 08 Regular: \$ 45,762,000 Contingent: \$ 13,330,000

○ FFY 07 Regular: \$ 45,240,083	Contingent: \$ 0
○ FFY 06 Regular: \$ 59,540,905	Contingent: \$ 18,678,651
○ FFY 05 Regular: \$ 43,032,954	Contingent: \$ 5,032,667
○ FFY 04 Regular: \$ 40,820,662	Contingent: \$ 921,356
○ FFY 03 Regular: \$ 40,796,025	Contingent: \$ 2,957,449
○ FFY 02 Regular: \$ 38,745,874	Contingent: \$ 2,308,716

**SB 720**, Second Regular Session, 94th General Assembly, 2008, RSMo. 660.115 - 660.135 Utilicare.

- Increase the maximum amount, from \$600 to \$800 per year that may be paid from the Utilicare Stabilization Fund to providers of heating or cooling on behalf of eligible households.
- Removes the \$5 million cap on the annual appropriations to the Utilicare Stabilization Fund, instead making it simply subject to appropriations each fiscal year.
- January, 2008: Missouri General Assembly approves \$6.44 million in state funds for Utilicare, which helps pay to insulate homes of low-income residents and to subsidize winter heating bills.
- Most of the major natural gas and electric utilities have instituted programs that provide funds to local community action agencies for weatherization of homes for low-income customers.
- Most of the major natural gas and electric utilities have instituted pilot programs that provide funds to assist lower-income or disabled customers with their energy bills, who meet the necessary qualifications.

Action Item 2: The state should fully fund Missouri's Utilicare Stabilization Fund.

Status:

- The state successfully funded Missouri Utilicare Stabilization Fund for FY 2008 in the amount of \$6,440,785.
- Funding was not approved for Missouri's Utilicare Stabilization Fund for FFY09.
- Funding was not approved for Missouri's Utilicare Stabilization Fund for FFY10.

Action Item 3: The State should work to ensure stable funding for both of these programs so the Community Action Agencies have adequate funds to assist low-income families throughout the winter.

Status:

- The Department of Social Services has been asked to look at placing Utilicare Stabilization Fund into their core budget.
- Utilicare is not included in the Departments 2011 budget request.

Action Item 4: In the event the state is unable to provide funds, a permanent funding for the Utilicare program should be found.

Status:

- Utilicare is not included in the Department's 2011 budget request.

Action Item 5: DSS should transfer to DNR in FY 2007 an amount equal to 5 percent of the total LIHEAP funds received by DSS to be used for weatherization. In FY 2008 and FY 2009, this amount should increase to 10 percent.

Status:

- DSS and DNR have successfully transferred 10 percent of LIHEAP funds for FY 2008 and FY 2009 and will continue to monitor its success as it relates to studying the electricity and heating fuel consumption before and after weatherization. DSS FFY2010 LIHEAP Abbreviated Plan eliminated set-aside of LIHEAP funds to DNR for Weatherization due to increased funding received by DNR through the American Recovery and Reinvestment Act (ARRA). DSS FFY 2011 LIHEAP Abbreviated Plan eliminated set-aside of LIHEAP funds to DNR for Weatherization due to ARRA funding.
- American Recovery and Reinvestment Act Low-Income Weatherization funds achieve goal of providing a minimum of \$120 million from April 1, 2009 to March 31, 2012.

Action Item 6: DSS should modify its rules to require individuals who live in owner-occupied dwelling and who receive energy assistance to be referred to the appropriate agency for weatherization. Recipients failing to follow up on referrals may have benefits sanctioned.

Status:

- While a specific rule has not been adopted by DSS, local community action agencies are referring applicants to weatherization programs including weatherization kits, audits performed by auditors certified through the DNR certification program and actual weatherization of homes.
- DSS Family Support Division has provided local community action agencies listing of LIHEAP applicants that indicate their homes have not been weatherized in the LIHEAP Energy Assistance computer system.

Action Item 7: To the extent possible, all utilities should be encouraged to work together to standardize low-income customer assistance programs that will make mass-communication efforts easier.

Status:

- All utilities, DNR and the PSC collectively developed an education program for energy efficiency. This program is referred to as Be Energy Efficient (BEE). A website has been developed and is online at [www.dnr.mo.gov/bee/links.htm](http://www.dnr.mo.gov/bee/links.htm), as well as printed materials containing energy saving tips. This website is updated as needed. A biannual newsletter is distributed and a PowerPoint presentation is available.
- Most of the major natural gas and electric investor-owned utilities provide funds to local community action agencies for weatherization of homes for low-income customers.
- All utilities communicate the availability and steps required for low-income customers to obtain Low Income Home Energy Assistance Program (LIHEAP) funds.
- Utilities provide assistance funds, which are collected from ratepayers, for distribution as charitable funds.
- The PSC, with the cooperation of several utilities, and OPC have worked to develop programs involving low income rates, arrearage forgiveness, and special weatherization.
- American Recovery and Reinvestment Act funds, for approximately 18 months, will provide up to \$6,500 (up from \$3,500) for weatherization of

homes for families at or below 200% (up from 150%) of the Federal Poverty Guidelines.

Action Item 8: The PSC should lower the percentage of money required for customers to reconnect their utility services during winter months.

Status:

- The PSC reduced the amount required for customers to reconnect utility services during winter months through the adoption of amendments to 4 CSR 240-13.055.

Action Item 9: The PSC should monitor the need for a "hot weather" rule

Status:

- Section 660.123 was passed August 28, 2008 which establishes a hot weather rule in effect between June 1 and Sept. 30 of each year. During this time, natural gas or electricity providers are prohibited from disconnecting service to residential customers on days when either the temperature is expected to rise above 95 degrees or the heat index is expected to rise above 105 degrees during the subsequent 24-hour period or on days when service personnel will be unavailable to reconnect service and the temperature or heat index is expected to rise above these marks. This statute implemented provisions practiced on a voluntary basis by PSC- regulated utilities.
- The hot weather rule has been followed by all Missouri electrical utilities; therefore, it appears to be sufficient to meet the requirements stated in the statute and for the health and safety of Missourians.

### **Action Items to Ensure Affordable Natural Gas and Electricity.**

Action Item 1: At minimum, the PSC should consider innovative rate designs that allow customers to "lock-in" their rate for natural gas for as long as a year.

Status:

- A pilot program was permitted, but no further programs have been implemented. Dramatic natural gas market volatility has made these programs more difficult to design and implement and the number of parties available to provide these services has been reduced. (Aquila Gas ET-2008-0396, EO-2007-0395 and EO-2007-0427).

Action Item 2: The PSC should study the results of Aquila's "Fixed Bill" pilot program that allowed customers to obtain a fixed bill for a year with no true-up for the utility at the end of the year.

Status:

- The company requested changes to its fixed bill tariff that the Commission could not grant. At the same time, Aquila merged with Great Plains Energy and the program was discontinued. The PSC ended the program because it did not encourage efficiency. (Report and Order - In the Matter of Tariff Revisions filed by Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P Designed to Continue And Expand its Fixed Bill Pilot Program - Case No. EO-2007-0395)

Action Item 3: The PSC should investigate the cost-feasibility and uses of advanced metering to allow customers to monitor their usage and consumption patterns.

Status:

- PSC staff and utilities continue to investigate smart grid technology to help Missourians gain greater knowledge of usage and consumption patterns without incurring unacceptable equipment cost increases. This is an area of rapid technological advancement and the PSC continues to monitor deployment opportunities by regulated electric utilities.
- On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. Among other things, EISA amended various parts of the Public Utility Regulatory Policies Act of 1978 (PURPA). PURPA's general objectives are to encourage: (1) conservation of electric energy, (2) efficiency in use of facilities and resources by electric utilities, and (3) equitable rates to consumers of electricity. Pursuant to EISA, the PSC is required to make a determination regarding acting upon the new standards. The PSC established the following working files to gather information related to its consideration as to whether to adopt standards related to Smart Grid Investments, Smart Grid Information, Rate Design Modifications to Promote Energy Efficiency Investments and Integrated Resource Planning.
  - EW-2009-0292 – A repository for items related to the Consideration of Adoption of PURPA Section 111(d)(18) Smart Grid Investments Standard and PURPA Section 111(d)(19) Smart Grid Information Standard, as required by Section 1307 of the Energy Independence and Security Act of 2007.
  - EW-2009-0291 – A repository for items related to the Consideration of Adoption of PURPA Section 111(d)(17) Rate Design Modifications to Promote Energy Efficiency Investments Standard, as required by Section 532 of the Energy Independence and Security Act of 2007.
  - EW-2009-0290 – A repository for items related to the Consideration of Adoption of PURPA Section

111(d)(16) Integrated Resource Planning Standard, as required by Section 532 of the Energy Independence and Security Act of 2007.

- The Green Impact Zone is a project in a 150-block area in Kansas City's urban core. The project will include such things as energy management systems, programmable thermostats and advanced meters that deliver two-way communications, all designed to involve the consumer in monitoring and managing energy usage. The PSC Staff is participating on various committees related to the project.
- The MoPSC has initiated several workshops and conferences to discuss the future of Smart Grid in Missouri. All known stakeholders, including the IOUs of Missouri, other government organizations, potential vendors, consumer advocates, and other stakeholders have been involved in the workshops. PSC staff have compiled a Smart Grid status report, which is a working document to discuss Smart Grid-related issues in Missouri. The report recommends the PSC hold periodic smart grid workshops to discuss issues, including issues related to rate design.

Action Item 4: The PSC should closely monitor the wholesale markets for price manipulation.

Status:

- The Federal Energy Regulatory Commission and the US Commodity Futures Trading Commission monitor the wholesale markets. The PSC continues to monitor federal websites and press for cases that could lead to recovery of costs for Missouri consumers.
- The PSC pursued litigation, MO PSC v. ONEOK, Inc. et. al, to recover costs it believes were wrongly passed to consumers. The case went to the state supreme court but the MoPSC did not prevail.
- The MoPSC participated in two interstate pipeline rate cases at FERC that were settled during 2010 reducing gas transportation rates to Missouri consumers. The Natural Gas Pipeline Company of America settlement will result in annual savings of \$1 million to customers in southeast Missouri and the MoGas Pipeline, LLC settlement will provide \$3.5 million in annual savings from the increased rates proposed by the company to customers in St. Louis to Rolla.

Action Item 5: The PSC should consider rate designs that reward customers for conservation efforts.

Status:

- The traditional rate design currently used by most utilities regulated by the PSC tends to reward customers for conservation efforts in that parts of the customers' bills are based on usage and thus bills will be lower if customers conserve. Some rate designs implemented by the PSC (such as straight fixed/variable rates and declining block rates) tend to diminish this reward, but do not eliminate it. The PSC has implemented rate designs that do not penalize utility service providers for aggressively supporting energy efficiency programs for some of the gas utilities, but these rate designs reward customers for conservation efforts to a lesser degree than traditional rate designs. These rate designs have been implemented in tandem with modest energy efficiency programs including mandates for stakeholder collaboratives, shareholder investments in efficiency and rate payer financed programs encouraging efficiencies. The PSC has not implemented rate designs (such as aggressively inclining block rates) that would do more to reward conservation than traditional rate designs.
- **SB 376** (2009) established the Missouri Energy Efficiency Investment Act and changes the laws regarding the purchase of appliances with state funds, and dealt with energy assistance. The PSC must allow electric companies to implement and recover costs related to PSC-approved energy efficiency and demand response programs when the program has been approved by the PSC, the program results in energy or demand savings, and the program is beneficial to all customers in the class for which the program is proposed. The PSC may develop cost recovery methods to encourage further investments in energy efficiency programs, which may include capitalization of investments, rate design modifications, accelerated depreciation, and allowing the company to retain a portion of the net benefits for its shareholders. The PSC is required to apportion the costs and benefits of energy efficiency and demand response programs to each customer class except that it may reduce or exempt costs to low-income classes.

The PSC issued an Order opening a docket EW-2010-0187 on January 6, 2010, to investigate the implementation of various demand side programs and the effect of FERC Orders 719 and 719-A on Missouri electric utilities and ARC operation in market opportunities within MISO and SPP. The Federal Energy Regulatory Commission (FERC) issued Orders 719 and 719-A ordering Regional Transmission Organizations (RTOs) and Independent Transmission System Operators (ISOs) to amend their market rules to allow Aggregators of Retail Customers (ARCs) to bid demand response resources from retail customers directly into the RTO and ISO wholesale energy and ancillary services markets, unless the laws or regulations of the relevant retail electric regulatory authority do not permit a retail customer to participate. The FERC found that allowing ARCs to act as intermediaries in the organized market would reduce barriers to demand response.

Action Item 6: The PSC should work with Missouri utilities to develop a program that will target low-income, high-use electricity users and natural gas customers for weatherization assistance and education programs.

Status:

- Most of the major natural gas and electric utilities have instituted programs that provide funds to local community action agencies for weatherization of homes for low-income customers.
- The PSC continues to work with utilities, DNR and CAA weatherization groups to target individuals who would benefit from weatherization. The Green Impact Zone is a project in a 150-block area in Kansas City's urban core. The area has been devastated by high rates of poverty and unemployment. The project may include such things weatherizing every home in the area; hyper-efficient heat pumps; energy management hubs for consumers to monitor energy usage; residential, commercial and school rooftop solar demonstrations; enhanced electric systems; and a smart grid demonstration. The PSC is participating on various committees related to the project – Coordinating Council, Data Committee, Energy Efficiency, Infrastructure Committee – as well as communicating with Kansas City Power & Light.
- The PSC, with the cooperation of several utilities, has worked to develop programs involving low income rates, arrearage forgiveness, and special weatherization.
- American Recovery and Reinvestment Act funds, for approximately 18 months, will provide up to \$6,500 (up from \$3,500) for weatherization of homes for families at or below 200% (up from 150%) of the Federal Poverty Guidelines. Following a joint planning effort between DNR and utilities operating low-income weatherization programs, the PSC approved changes to the natural gas and electric utility low-income weatherization programs to help utilize grant money provided through this federal act.
- In addition to administration of the federal Low-Income Weatherization Assistance Program, DNR administers the weatherization utility funds for Ameren Missouri electric and gas, Atmos and Laclede Gas companies.

## **Action Items to Ensure Affordability of Natural Gas.**

Action Item 1: The PSC should continue encouraging gas distribution utilities to create additional natural gas storage to enhance reliability and mitigate price volatility.

Status:

- The PSC continues to encourage natural gas distribution utilities to evaluate gas supply options, including storage, to reliably and cost-effectively meet the needs of its customers.

Action Item 2: The PSC should consider revising its price volatility mitigation rule for natural gas to include a minimum hedging requirement.

Status:

- Rule not amended regarding setting specific hedging minimums.
- All PSC-regulated natural gas utilities have hedging programs. The PSC staff and other parties have discussed this issue at length and caution that the focus of hedging programs is reduced volatility, not necessarily the lowest price.
- SB 558, (Second Regular Session, 93rd General Assembly, 2006) RSMo. Sec. 393.310.
  - This act removes the termination dates for experimental tariffs enacted by the Public Service Commission that provide for the aggregate purchase of natural gas for schools in the state.
- All Missouri natural gas distribution utilities currently establish hedging targets in their gas supply planning.

## **Action Items to Improve Affordability of Electricity.**

Action Item 1: The PSC should closely monitor any activities at the federal level related to carbon emissions to ensure that any new rules prohibiting or taxing carbon emissions do not injure Missouri ratepayers.

Status:

- The PSC closely watches proposals at the federal level, including legislation introduced in 2009 that would establish a carbon cap-and-trade or carbon tax system. The PSC continues to monitor this legislation due to the deep concerns over the impact on Missouri rate payers.

- As a part of the PSC required resource planning process, electric utilities are required to evaluate a range of future generation resource options and their relative cost under different environmental regulations -- including carbon regulations. This process is currently resulting in changes to future resource options -- including greater deployment of energy efficiency, renewables and nuclear energy.

Action Item 2: The PSC should work to lower the costs and provide cost certainty for transactions involving Regional Transmission Authorities (RTOs)

Status:

- The PSC is actively engaged through organizations such as the Organization of MISO States and the Southwest Power Pool Regional State Committee, through cases before the Commission and through the Federal Energy Regulatory Commission to help contain transmission costs that are reflected in rates for utility services in Missouri.

Action Item 3: The PSC should work with state, federal and other agencies to ensure that Missouri utilities investing in power generating plants are guaranteed firm transmission rights from those plants to their Missouri customers.

Status:

- The PSC, through involvement with organizations of states served by ISOs and through communications with the Federal Energy Regulatory Commission, is working to help assure transmission rights from generation facilities to Missouri customers.
- Missouri is also involved in the Eastern Interconnection State Planning Collaborative (EISPC), a federally funded process for evaluating upgrades, expansion and hardening of the Eastern Interconnection involving 41 states.

### **Action Items for Improving Affordability of Propane.**

Action Item 1: DFS should work with the Community Action Agencies participating in its propane prepayment program to determine the benefits of the program, if any, to consumers.

Status:

- During the 2007/2008 heating season, a prepaid propane pilot program was provided through three Community Action Agencies (CAAs).

Eligible head of households who were 60 years or older or disabled and received propane had a flat \$360 amount applied to their account. The CAAs that participated indicated the pilot program did not provide improved pricing. Propane prices actually went down during the 2008/2009 season, eliminating the cost effectiveness outcome desired by the prepaid propane program. It has been determined that making a payment during the regular season is to the advantage of the low income customer and more cost effective for the program.

- **SB 720**, Second Regular Session of the 94th General Assembly, (2008) RSMo. Secs. 660.115 - 660.135 -- **Utilicare**:
  - Increases the maximum amount, from \$600 to \$800 per year, which may be paid from the Utilicare Stabilization Fund to provide heating or cooling on behalf of eligible households. Among the various issues this attempts to address is the problem of assistance matching minimum amounts required to fill liquid-propane tanks.

## **V. Recommendations for Future Task Force Action:**

Action Item 1: The task force should reconvene in November, prior to the start of the prefiling of bills on Dec. 1, 2006, to consider comments in response to the recommendations contained herein and any legislative proposals.

Action Item 2: A similar task force should be reconvened every three or four years to monitor the state's progress in these areas and to update recommendations.

Status:

- **SB 1181**, Second Regular Session 94th General Assembly (2008) RSMo. Sec. 386.850:
  - The Missouri Energy Task Force created by Executive Order 05-46 shall reconvene at least annually to review progress toward meeting the recommendations made in its final report as issued under the Executive Order. The task force shall issue its findings in an annual status report to the Governor and General Assembly.

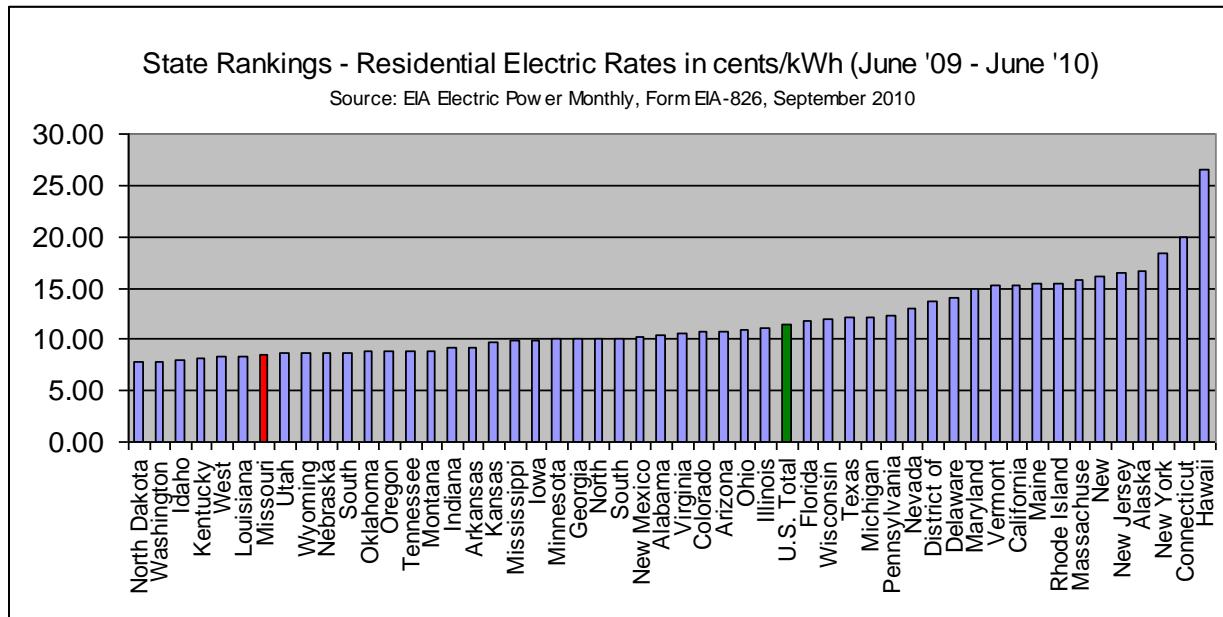
## **Dissent of Representative Ed Emery**

This report does not adequately capture the latest science or honestly assess the current potential for addressing the four original Task Force charges. The report is confined to assessing movement toward the 2006 recommendations rather than ongoing reassessment of them. So much has changed in the field of energy that the people of Missouri do not receive sufficient benefit from such a bureaucratic model of preserving the status quo. A dynamic annual analysis of market forces, technology advances, and economics should be at the core of every annual report. Such a report would be more substantive and visionary.

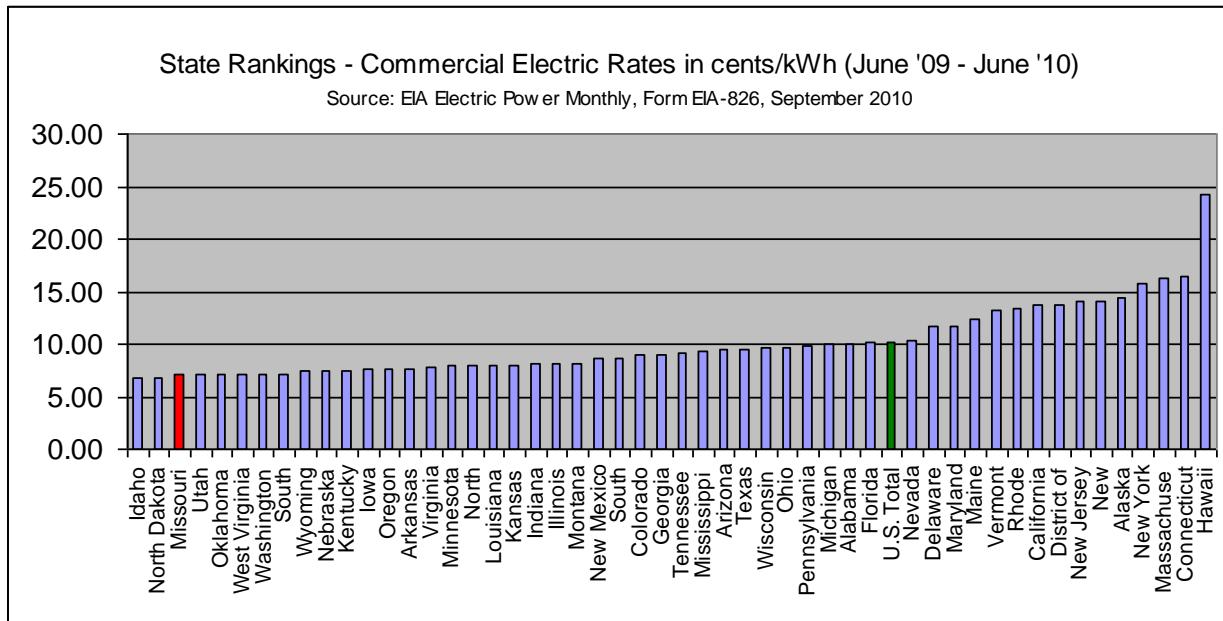
Sincerely,  
Ed Emery

## Attachments –

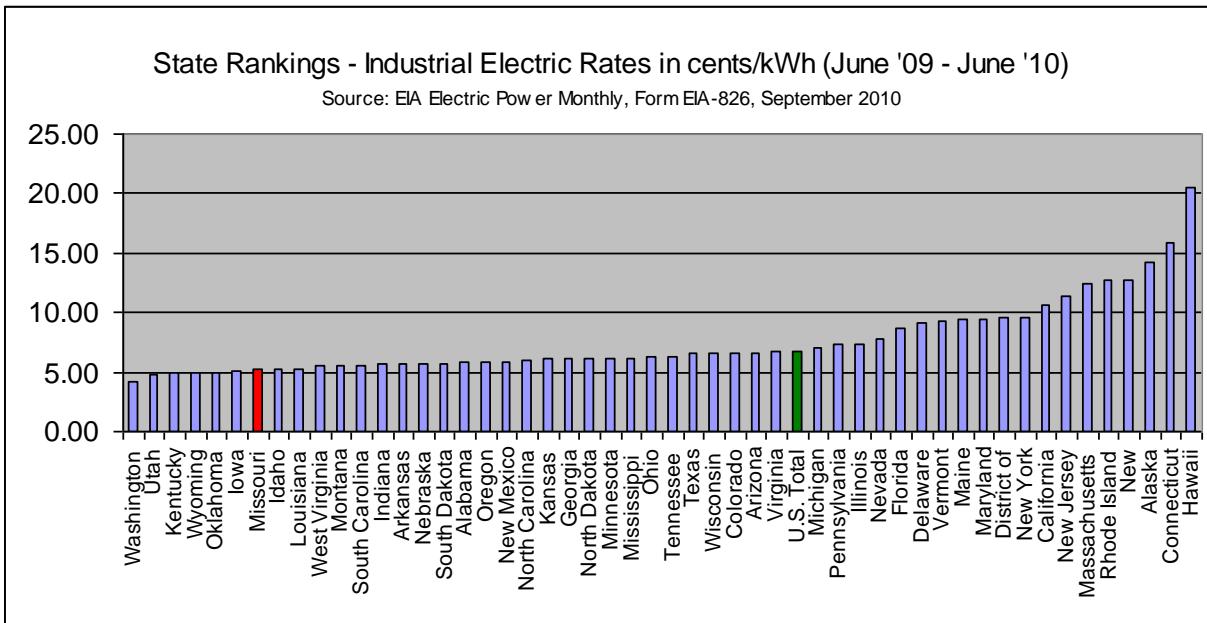
## Attachment 1



## Attachment 2



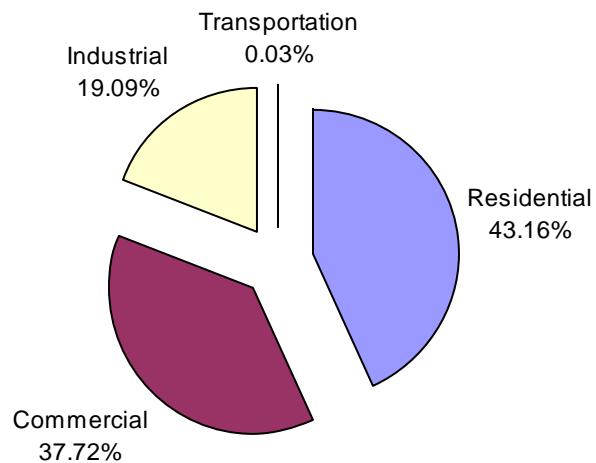
## Attachment 3



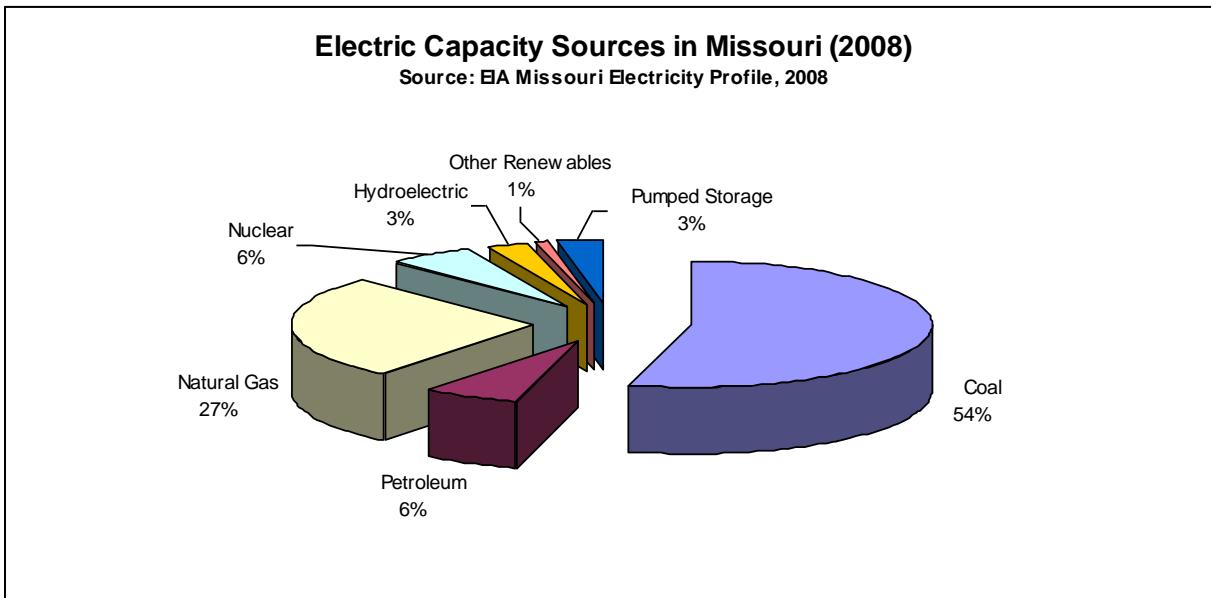
## Attachment 4

### Missouri Electricity Use by Sector (June '09 - June '10)

Source: EIA Electric Power Monthly, Form EIA-826, September 2010



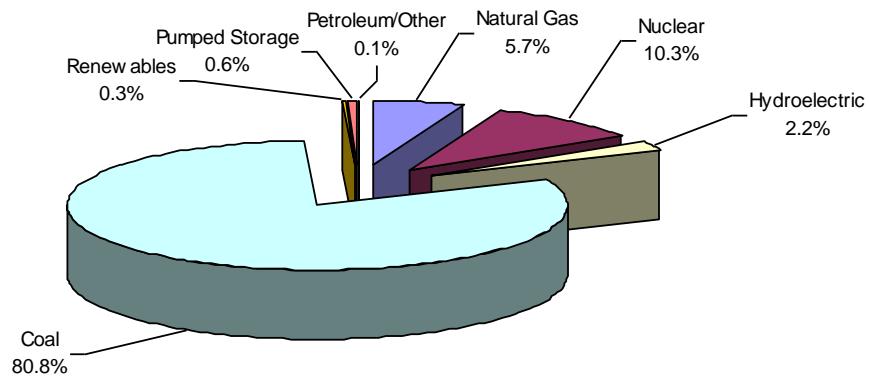
## Attachment 5



## Attachment 6



Source: EIA Missouri Electricity Profile, 2008



## Attachment 7

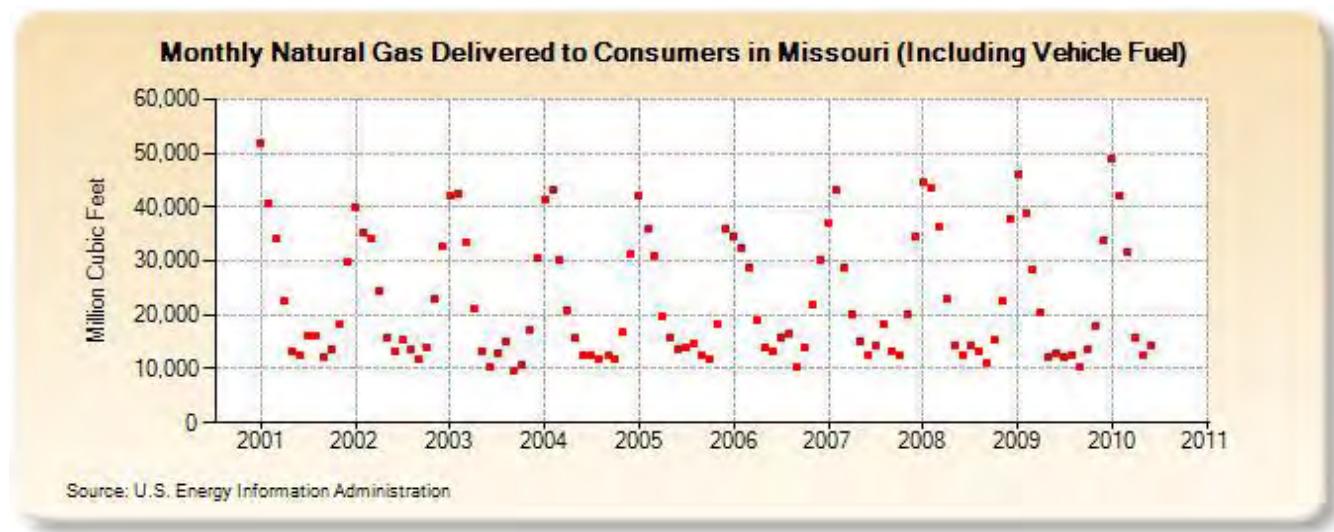
### Natural Gas (NG, NYMEX) Monthly Price Chart

Source: TFC Commodity Charts ([futures.tradingcharts.com/chart/NG/M](http://futures.tradingcharts.com/chart/NG/M)) (08OCT10)

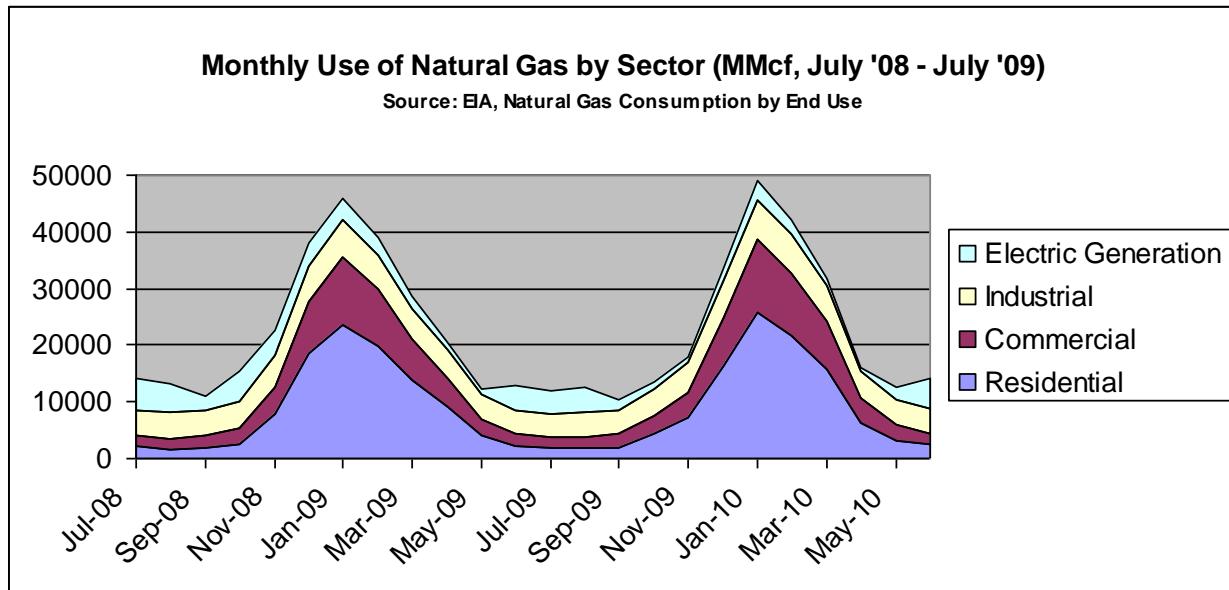


Source: U.S. Department of Energy – Energy Information Administration (U.S. DOE/EIA)

## Attachment 8



## Attachment 9



## Attachment 10

